
Systemic Risk Relevance of Pension Funds, Insurers and Asset Managers

Malcolm Kemp, Managing Director, Nematrian Limited

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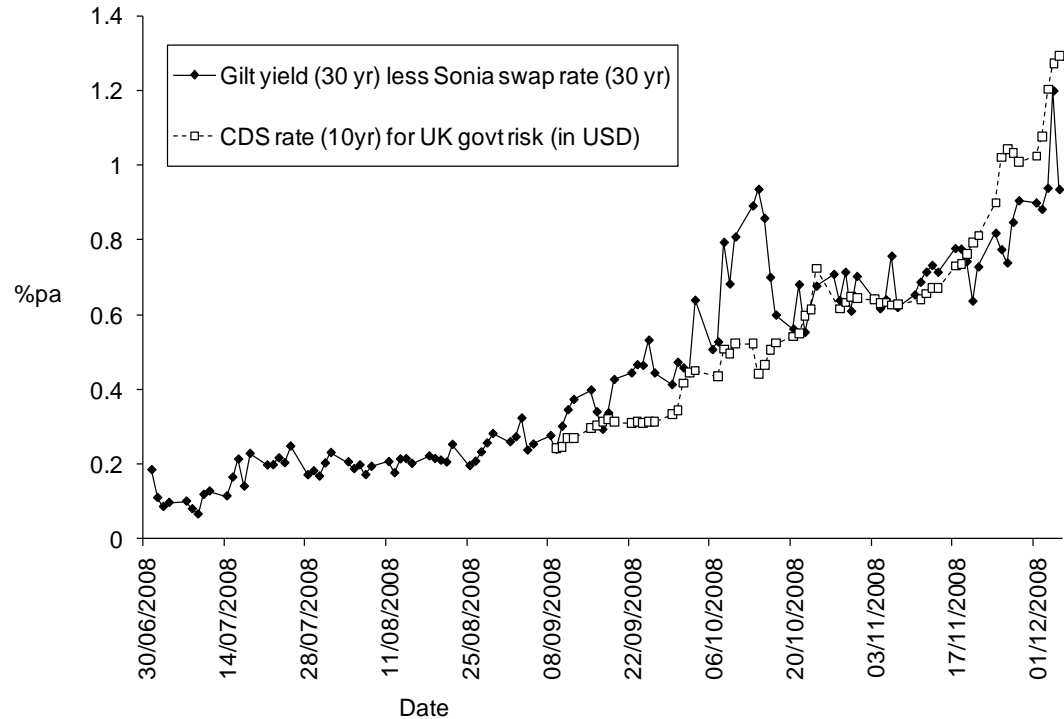
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- Typical industry perspectives
- Typical (systemic risk) regulator perspectives
- Who is correct?

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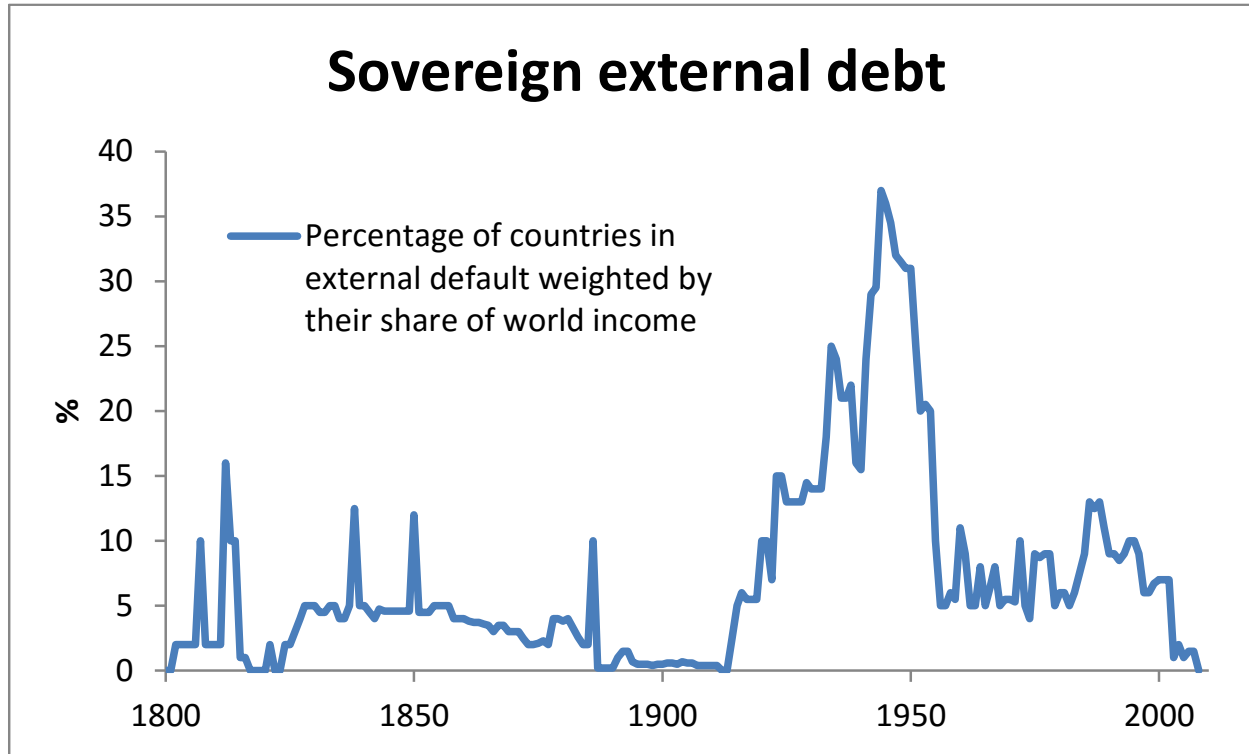
- Politicians and regulators worry about systemic risk, because of:
 - System-wide impact of the recent financial crisis, don't want a repeat
 - Maybe worry that political revolutions have often been triggered by financial crises
- Sceptical about extent of differences across financial sector regarding potential to create, amplify or transmit systemic risk. Problems during the Crisis included
 - Lehman, other banks, Freddie Mac, Fannie Mae
 - But also AIG, monoline credit insurers, money market funds (MMFs) and shadow banking
- Further back in time: LTCM, HIH, Savings & Loans, fall-out from Great Depression

And possible spill-overs to sovereign risk

- Potential to 'nationalise' banking crisis already evident by end 2008
- And highlighted in e.g. [Reinhart and Rogoff \(2009\)](#)
- Irish guaranteeing of bank debt seen as potentially unhelpful in retrospect
- C.f. Eurozone sovereign debt crisis



Source: [Kemp \(2009\)](#)



Source: Nematian, [Reinhart and Rogoff \(2009\)](#)

- Period just before 2007-09 credit crisis may have been particularly benign

- E.g. UK has:
 - Prudential Regulation Authority (PRA, part of Bank of England) and Financial Conduct Authority (FCA)
 - But also BoE Financial Policy Committee, with financial stability remit, can issue recommendations to anyone (including PRA and FCA)
- E.g. European System of Financial Supervision
 - EBA, ESMA, EIOPA, but also European Systemic Risk Board (ESRB)
- EU Capital Requirements Directive / Regulation ([CRD](#)/[CRR](#)) requires member states to designate a body responsible for macro-prudential supervision
- Financial Stability Board at international level

On macro-prudential policy [Haldane \(2014\)](#) notes

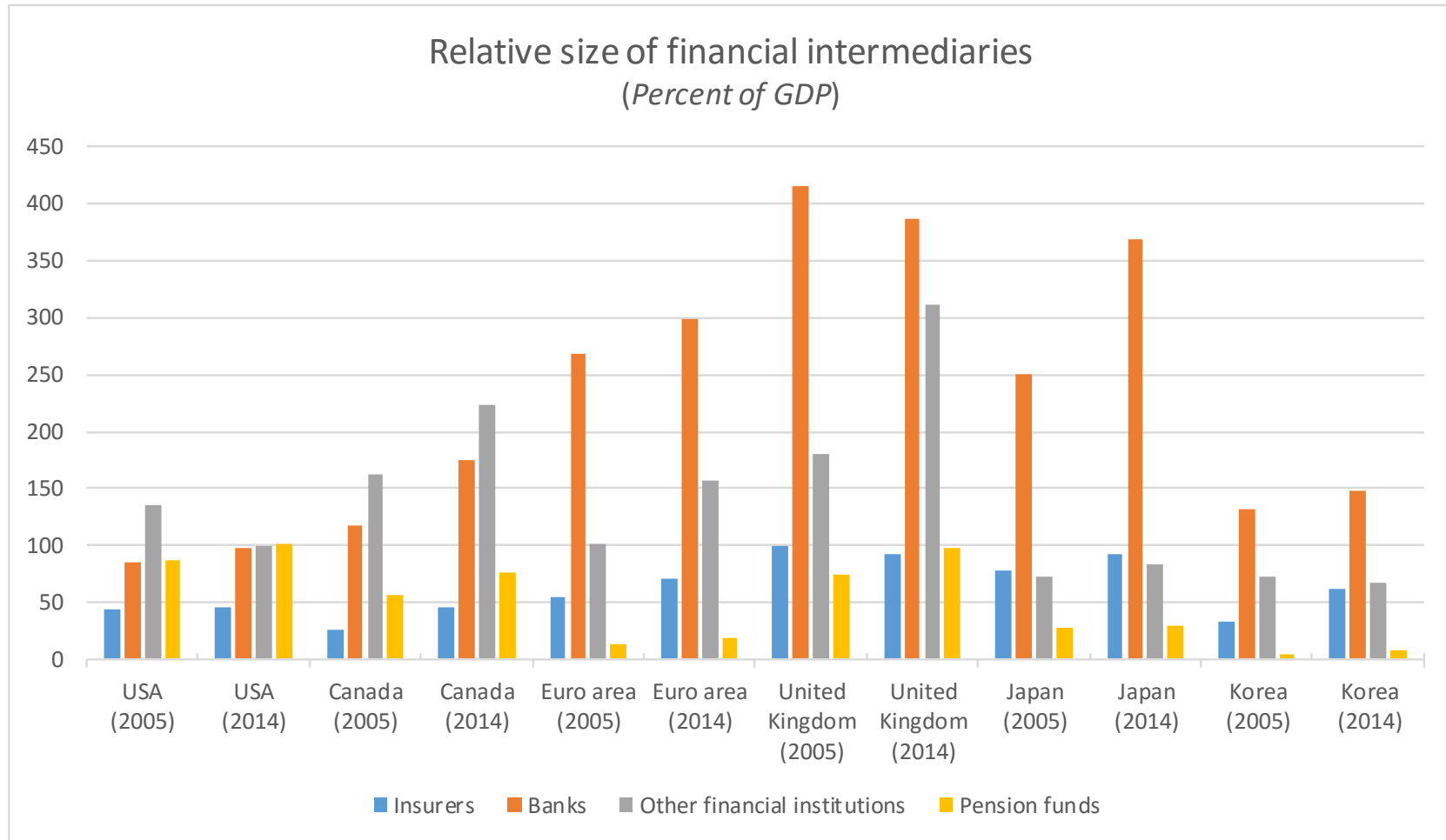
- *“Macro-prudential policy is gaining ground every bit as quickly as central bank independence did in the 1990s. It has quite radical implications. Pre-crisis credit cycles were allowed to operate largely unconstrained. Macro-prudential policy overturns that orthodoxy, with policy instead leaning against the credit cycle to moderate its fluctuations, both during the upswing and the downswing.”*
- He was hopeful that the financial system and economy may become less prone to the low-frequency, high-cost banking crises seen in the past. However, he thought that the financial system could *“exhibit a new strain of systemic risk – a greater number of higher-frequency, higher-amplitude cyclical fluctuations in asset prices and financial activity, now originating on the balance sheets of mutual funds, insurance companies and pension funds”* which could in turn be transmitted to, and mirrored, in greater cyclical instabilities in the wider economy.
- He thought it *“... likely that regulatory policy would need to be in a constant state of alert for risks emerging in the financial shadows, which could trip up regulators and the financial system. In other words, regulatory fine-tuning could become the rule, not the exception”*



Systemic risk not seen as just about banks

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Source: adapted from [IMF \(2016\)](#)

- Most obvious implication is for organisations deemed global systemically important financial institutions (G-SIFIs), including banks and insurers (called G-SIBs / G-SIIs depending on jurisdiction and type of entity)
- And FSB has consulted on including others, i.e. non-bank non-insurer (NBNI) G-SIFIs, see e.g. [FSB \(2014\)](#) and [FSB \(2015\)](#)
 - Proposed methodologies for assessment of (i) finance companies, (ii) market intermediaries (securities broker-dealers) and (iii) investment funds (including hedge funds)
 - Backstop methodology for all others, with market infrastructures assumed to be systemically important, at least in jurisdiction in which they are located

- Circa 30 banks deemed globally systematically important, subject to additional capital requirements of 1% - 2.5%
 - G-SIBs also subject to:
 - Group-wide resolution planning and resolvability assessments
 - Higher supervisory expectations for risk management functions, risk data aggregation capabilities, risk governance and internal controls
 - Additional Total Loss Absorbing Capacity (TLAC) requirements phasing in from 2019
 - Other banks may be deemed systemically important in their own jurisdictions
 - By end 2015 around 160 EU banks caught by CRD systemic risk buffer (with more expected, some member states had not yet selected their approach). Source: ESRB
- Logic for classification: negative externalities relating to implicit support and moral hazard, i.e. “too big to fail”, assessment based on: size, interconnectedness, complexity, lack of substitutability, global scope

- Circa 9 insurers deemed globally systematically important, subject to additional Higher Loss Absorbency (HLA) requirements and to:
 - Enhanced group-wide supervision (including group-wide supervisor to have direct powers over holding companies and to oversee the development and implementation of a Systemic Risk Management Plan and a Liquidity Management plan)
 - Group-wide resolution planning and resolvability assessments

- Classification rationale similar in theory to banks but weightings to factors differ and are currently under review, see IAIS (2015)
 - Views differ about appropriateness of systemic risk classification, IAIS stance: “Little evidence.. traditional insurance generates.. systemic risk”
 - Hence greater focus on non-traditional insurance / non-insurance (NTNI) activities, but exactly how should this be defined? Financial guaranty insurance, credit default swaps, derivatives trading? Variable annuities?

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■ Insurers:

- Traditional insurance is not systemically important
- As little (direct) interconnection with each other or with banks
- However NTNI activities (as per AIG and monoline credit insurers?) can create greater interconnectivity (as can e.g. banking subsidiaries)

■ Pension funds (in UK)

- No desire to be considered even akin to insurers let alone other parts of financial system. Part of real economy not the financial sector
- Or at most so obliquely linked with (banking) sector that systemic risk not relevant to (private sector) pension funds
 - Sufferers rather than creators of systemic risk



- More nuanced. Industry clearly:
 - Large and picking up business as banks retreat
 - Manages a lot of other people's assets including those of insurers, pension funds, sovereign wealth funds and even banks
- But liquidity risk borne by investors or managed by exit / deferral powers
 - So typically argue that systemic risk exposures are in practice limited to a handful of fund types, e.g. some types of MMFs and some hedge funds

- Falling within the systemic risk net can feel highly intrusive (but what regulation doesn't feel intrusive?)
- For organisations deemed systemically important **as well as eventually for everyone else**, e.g.:
 - Assicurazioni Generali business model changes, removal from G-SII classification, see e.g. [Jenkins \(2016\)](#)
 - MetLife legal action to challenge FSB designation, and now apparently planning to shrink
 - Development of IAIS ICS
- Push-back on FSB's proposals for asset managers, even apparently from some other supranational bodies

Consequence of decision to have some insurer G-SIFIs

Presumes that they will eventually be subject to higher capital requirements



Requires an agreed common base against which to measure “higher”



Requires a global capital framework (c.f. Basel III)



Hence IAIS proposals for a global **Insurance Capital Standard (ICS)** to be introduced by end 2016 and **Basic Capital Requirements (BCR)** introduced in 2014 **but once introduced for some why not for everyone?**

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- Insurers:
 - Generally seen as potentially systemically important, e.g. AIG, HIH
 - Seem to be growing in importance as banks retreat, e.g. [IMF \(2016\)](#)
 - Some life insurers writing guaranteed policies particularly exposed to low interest rate environment (and in EU possible future rebasing of Ultimate Forward Rate)

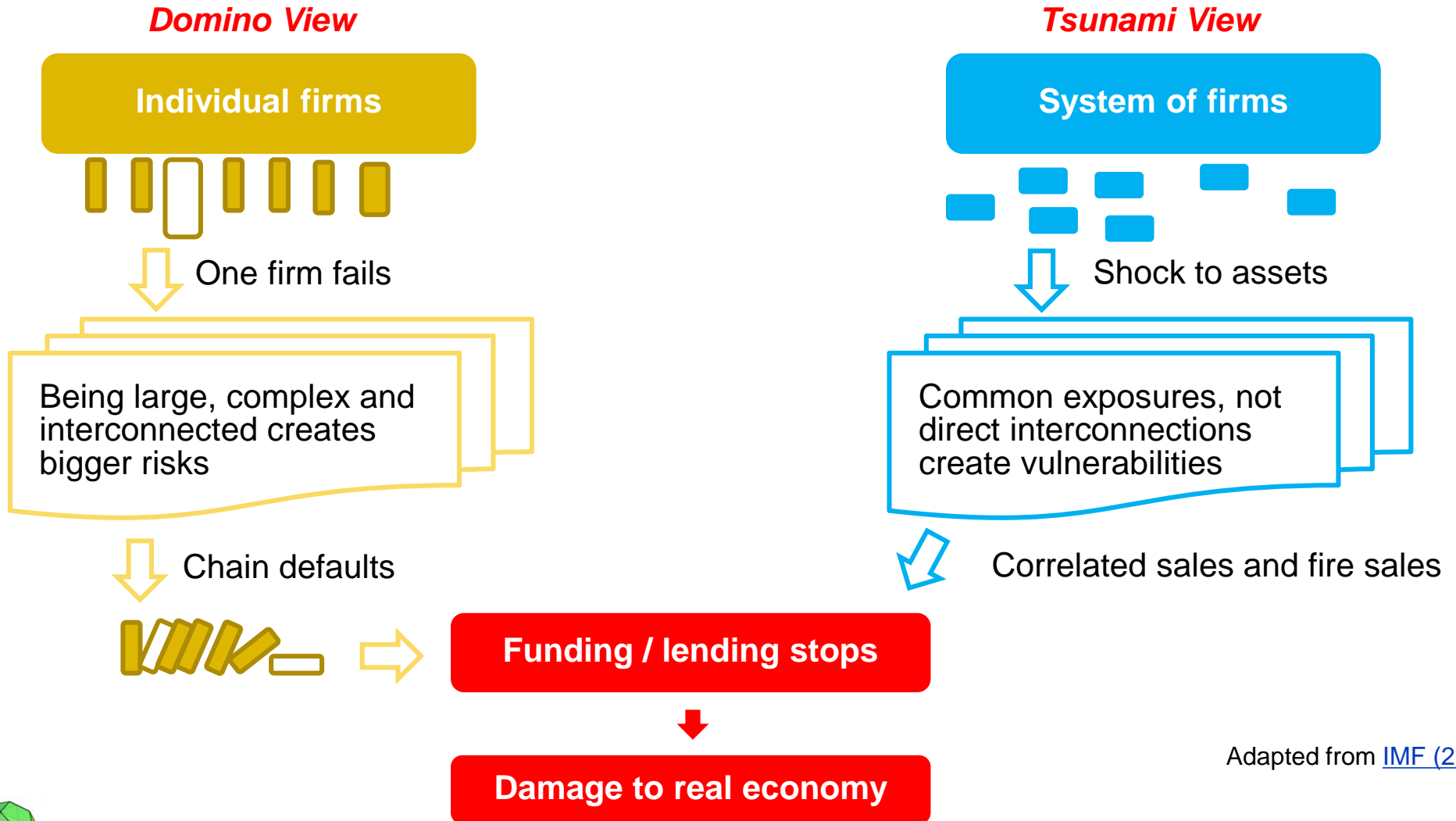
- Pension funds
 - Limited knowledge base within macro-prudential ('macropru') community
 - A priori also expected to be challenged by low interest rate environment
 - Any issues might take a long time to emerge and many political issues

- Asset managers:
 - Some specific concerns, e.g. Constant Net Asset Value (CNAV) versus Variable Net Asset Value (VNAV) MMFs
 - Asset Manager / Investment Fund based shadow-banking activities (hedge funds and others)
- Possible signs of a “search for yield”, although multiple interpretations of what we actually mean by this term
- Conversely, if we want safer banks then someone must carry the risks (e.g. other institutions / end customers?)
 - C.f. EU political enthusiasm to broaden sources of funding away from banks

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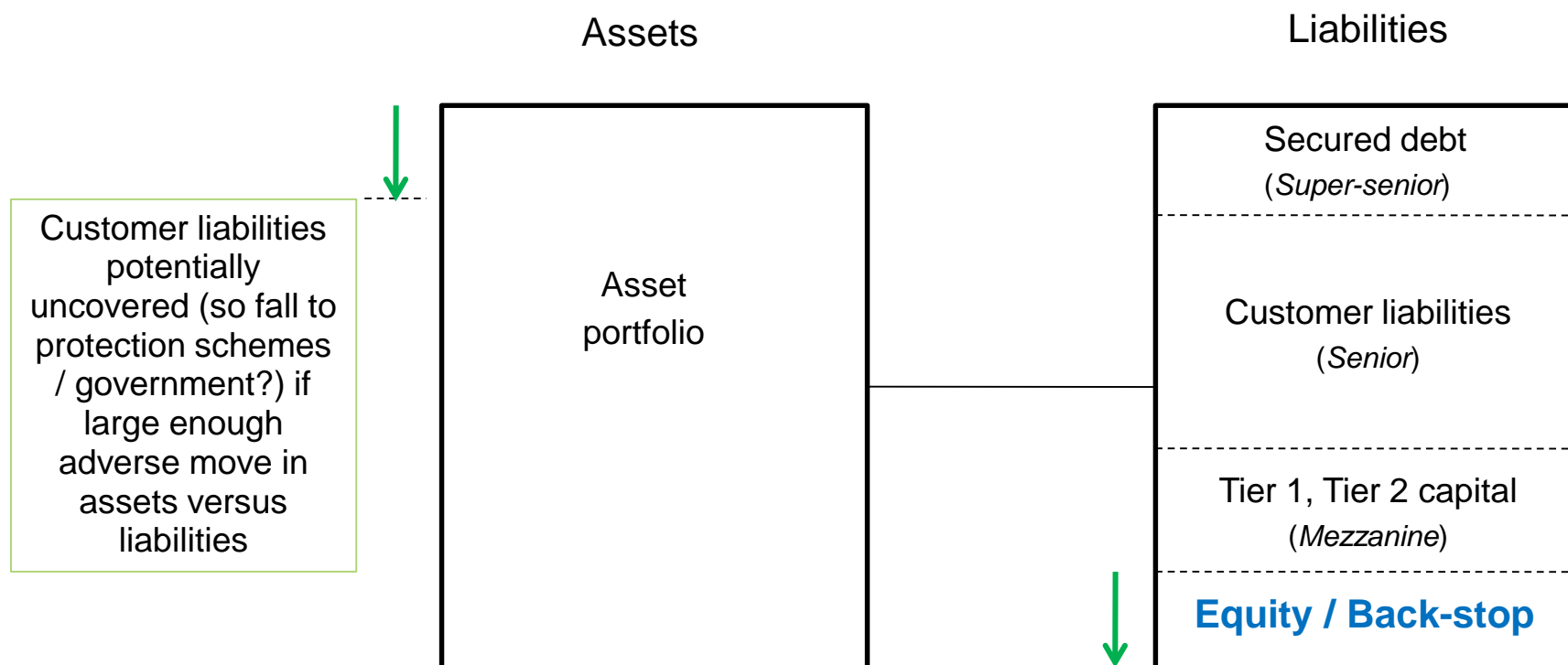
- Some differences reflect different possible interpretations of data
 - E.g. is there currently a “search for yield”?
- Some differences highlight macro-economic orientated modes of thought common in the macro-prudential community
 - E.g. analyses include bond fund “leverage” statistics that focus on proportion in bonds divided by proportion in cash
 - Aligns to fractional banking and maturity transformation banking concepts
 - But result of investor choice to invest in a bond fund, not manager actions?
- Some reflect different emphasis given to different sorts of interconnectedness

Interconnectivity doesn't have to be direct to matter



Adapted from [IMF \(2016\)](#)

The capital waterfall: subordination, tiering and tranching



- C.f. (regulatory) capital designed to absorb unexpected losses. Hence tiering.
- We can also apply same waterfall concept to entire financial or economic system (with asset portfolio now consisting of multiple firms)

- Concept of tranching and a capital waterfall can be applied to **financial systems** as well as **individual firms** (but also to **CDOs** etc.)
 - Implied correlation can go very high in very stressed circumstances
- Common firm-level systemic risk measures, such as conditional value at risk (**CoVaR**) and Marginal and Systemic Expected Shortfall (**SES**), in effect represent marginal contribution to value of the lowest tranche
 - Contributions to systemic risk can be significant even if **no direct interconnectivity**.
 - Quantification of risk (unlike understanding of risk) is largely agnostic to the source of an unwanted correlation:
 - Could merely reflect common investment holdings or exposures
 - Or even just market worries about possible commonalities, c.f. MMF ‘runs’ during financial crisis, Roosevelt’s “the only thing we have to fear is fear itself”



- Bigger firms typically have bigger reach, so typically have more direct interconnections
 - If direct interconnectivity less important then size maybe also less important
- Increases relevance of tools applicable to whole sector rather tools targeting just the largest players?
 - More likely that ICS etc. will morph towards an industry-wide standard?
- And increases focus on sector-wide vulnerabilities, such as those arising from a low interest rate environment

- Capital waterfall concept also applies to pension funds
 - Indeed to the whole economy?
 - Systemic risk debates can be very wide-ranging, c.f. [Carney \(2015\)](#) and climate change
- Pensions community often refers to a **pensions system**
 - So presumably this system is subject to ‘systemic risk’ at least in relation to itself
 - E.g. what would happen if there was a severe enough recession to cause a national pension protection scheme to run into difficulties?
- How do those outside the pensions community view the link between the pension system, the (wider?) financial system and the (wider?) economy?
 - And will this view change in the future?

- Introduction
 - Greater emphasis on financial stability a very important regulatory development
- Typical industry perspectives
 - Primarily a banking issue as most directly interconnection involves banks
- Typical (systemic risk) regulator perspectives
 - Systemic risk of banks is being tackled. Where else is vulnerable?
- Who is correct?
 - Industry perspective looks possibly complacent and overly focused on the view that the only thing that counts in practice is level of direct interconnectedness (to banks)

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